

**SUMMARY OF HYDROLOGIC CONDITIONS  
IN THE  
UPPER DELAWARE RIVER BASIN**

**May 2003**

Prepared by the  
Office of the Delaware River Master  
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during May was in the normal range. The maximum daily mean discharge of 9,850 cfs occurred on May 4. The minimum daily mean discharge was 3,200 cfs on May 25.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during May was 5,313 cfs, which is 76 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 6,318 cfs, or 77 percent of median (water years 1961-90).

On the basis of a 5-station average, precipitation during May was 3.57 inches, which is 85 percent of the 62-year average. The maximum daily-average precipitation during the month was 0.54 inches on May 26. Precipitation in the upper Delaware River Basin during the past 12 months was 1.74 inches more than the long-term average. Precipitation during May was 0.65 inches less than the long-term average for the month.

Combined storage June 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 101 percent of capacity above the point of maximum depletion. The combined storage of 273 billion gallons was 1 billion gallons more than that of one month ago and 51 billion gallons more than that of one year ago. Median storage on the first day of June in 36 years of record is 269 billion gallons.

As part of a statewide network, the USGS operates 12 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during May were below average in 9 of the wells. Water levels in all 12 of the wells were below April 2003 levels, and water levels in 7 of the wells were above May 2002 levels.

# HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

## PRECIPITATION, IN INCHES

|       | Dec. 1940 to May 2002 |            | June 2002 to May 2003 |            |                    |            |                           |            |
|-------|-----------------------|------------|-----------------------|------------|--------------------|------------|---------------------------|------------|
|       | Average               |            | Actual                |            | Percent of average |            | Excess (+) or deficit (-) |            |
|       | Amount                | Cumulative | Amount                | Cumulative | By month           | Cumulative | By month                  | Cumulative |
| June  | 3.96                  | 43.14      | 5.74                  | 44.88      | 145                | 104        | +1.78                     | +1.74      |
| July  | 4.07                  | 39.18      | 1.32                  | 39.14      | 32                 | 100        | -2.75                     | -.04       |
| Aug.  | 3.83                  | 35.11      | 3.31                  | 37.82      | 86                 | 108        | -.52                      | +2.71      |
| Sept. | 3.86                  | 31.28      | 5.40                  | 34.51      | 140                | 110        | +1.54                     | +3.23      |
| Oct.  | 3.35                  | 27.42      | 6.30                  | 29.11      | 188                | 106        | +2.95                     | +1.69      |
| Nov.  | 3.79                  | 24.07      | *3.96                 | 22.81      | 104                | 95         | +.17                      | -1.26      |
| Dec.  | 3.35                  | 20.28      | 4.68                  | 18.85      | 140                | 93         | +1.33                     | -1.43      |
| Jan.  | 2.98                  | 16.93      | 2.38                  | 14.17      | 80                 | 84         | -.60                      | -2.76      |
| Feb.  | 2.63                  | 13.95      | 2.59                  | 11.79      | 98                 | 85         | -.04                      | -2.16      |
| Mar.  | 3.36                  | 11.32      | 3.00                  | 9.20       | 89                 | 81         | -.36                      | -2.12      |
| Apr.  | 3.74                  | 7.96       | 2.63                  | 6.20       | 70                 | 78         | -1.11                     | -1.76      |
| May   | 4.22                  | 4.22       | 3.57                  | 3.57       | 85                 | 85         | -.65                      | -.65       |

Note: Amount shown in cumulative columns is total from month shown to present.

\* Revised since last month.

## STREAMFLOW, IN CFS DELAWARE RIVER AT MONTAGUE, N.J.

| Month           | 1940-2001     |        |              | 2003<br>Monthly mean | Percent of<br>median |
|-----------------|---------------|--------|--------------|----------------------|----------------------|
|                 | Maximum       | Median | Minimum      |                      |                      |
| May (observed)  | 16,090 (1943) | 6,998  | 2,215 (1965) | 5,313                | 76                   |
| May (adjusted)  | 18,970 (1989) | 8,234  | 2,944 (1941) | 6,318                | 77                   |
| June (observed) | 15,200 (1972) | 3,284  | 1,214 (1965) |                      |                      |
| June (adjusted) | 16,010 (1972) | 3,960  | 1,024 (1962) |                      |                      |